

# COMPARATIVE STUDIES ON NATURAL GAS AND NUCLEAR POWER (POL/0/006) C4

New

MODEL PROJECT

## CORE FINANCING

YEAR	Experts		Group Activity	Equipment	Fellowships		Scientific Visits		Group Training	Sub-Contracts	Misc. Comp.	TOTAL
	m/d	US \$	US \$	US \$	m/d	US \$	m/d	US \$	US \$	US \$	US \$	US \$
1999	0/25	12,250	0	0	0/0	0	0/7	2,520	0	0	0	14,770
2000	0/15	7,725	0	0	0/0	0	0/7	2,660	0	0	0	10,385

First Year Approved: 1999

**OBJECTIVES:** To establish a clearly defined energy planning framework using Agency tools and to assess the economic competitiveness and environmental impact of different energy options, including nuclear power and natural gas.

**BACKGROUND:** Poland depends heavily on coal to satisfy national demands for electricity. Currently, over 90% of electricity generation is produced by coal fired power plants. In order to foster a diversified energy mix and to

reduce environmental burdens associated with the energy sector, Poland is considering the expanded role of natural gas and nuclear power in the future energy mix of the country. The project is to provide a proven methodology (the Agency's energy and power evaluation programme - ENPEP) to be utilized in analysing different energy options and a structured approach for comparing these options.

**PROJECT PLAN:** Experts will assist in model creation and necessary data specification, advise on model running and analysis of the results, review progress and suggest follow-up activities by the national team. During the second year, the expert advice will concentrate on reviewing the final results, and drafting the final report.

**NATIONAL COMMITMENT:** The Energy Market Agency will make its premises, equipment and staff available. The Polish Foundation for Energy Efficiency will provide analysts with information concerning energy use and efficiency of conversion.

**AGENCY INPUT:** Expert services on ENPEP; training in the electrical sector and in external cost modeling.

**PROJECT IMPACT:** The project will build a national team of experts capable of assessing different energy options in terms of their associated costs, reliability and environmental impacts. The team will complete an assessment of potential energy sector options to help Poland meet binding targets on GHG emissions established in the Kyoto Protocol. Various scenarios of energy system development will be compared in order to identify these, which meet national objectives related to energy, diversification, costs, reliability and environmental impact.